In a third paper appears the translation of Ameghino's recent summary of his researches upon the geology and paleontology of Argentina,* followed by a critical review of the same by the writer, who has recently examined the Argentine collections. He does not accept the evidence of the very great age assigned to the 'Pyrotherium' and overlying Beds and urges "that Señor Ameghino should show quite clearly why Pyrotherium cannot be a close ally of the large Australian Diprotodonts. It certainly differs from the Proboscidia in some of the most fundamental characters." In the Red Sandstones with Dinosaurian remains Dr. Santiago Roth has recently brought back a fine collection of small reptilia.† One of these is a typical and apparently fully-evolved snake, which the author had no time to study in detail. The others are small crocodilia, particularly interesting because they are typical Mesosuchia with the characteristic palate and amphicœlous vertebral centra. They seem to be most closely related to the small Purbeckian *Theriosuchus* and its allies, differing, among other features, in their more highly specialized dentition, and referable to a new genus, which the author names *Notosuchus*.

Another important note‡ relates to a new specimen of *Sterosternum tumidum* from the State of San Paulo, Brazil, interesting as showing for the first time the general proportions of the trunk and tail of this strange extinct reptile. Stereosternum was originally described by Professor Cope in 1886, and in the same year Dr. Baur made it a type of the new Reptilian order termed Proganosauria. It is now evident, according to Woodward, that the animal is related in some undetermined way to the ancestry of the Plesiosauria. The head is of an elongate triangular form, but much shorter than the neck. The tail possesses not less than sixty vertebræ, of which the foremost seven bear robust transverse processes. As a whole the tail is thus somewhat more than twice as long as the trunk, occupying slightly less than three-fifths of the length of the entire animal. Dr. Derby has also obtained a typical Labyrinthodont tooth from the Silicious Limestones at Conchas. "In fact," Mr. Woodward concludes, "evidence is gradually accumulating to render it still more certain that the Karoo Series of South Africa is well represented by homotaxial deposits in the south of Brazil and in parts of the Argentine Republic."

A new specimen of Ceraterpeton* from the Coal Measures of Castlecomer, Kilkenny, Ireland, is the second example from the typical locality of Huxley's original description thirty years ago. This specimen found by Mr. Robertson is of special importance in making known for the first time many characters of the scapular arch and limbs. It now appears that the amended definition based by Fritsch upon specimens from the lower Permian of Bohemia does not apply to the genus with which Huxley was dealing when he originally proposed the name. The generic name *Scincosaurus* originally applied by Fritsch to his Bohemian specimens ought thus to stand. The skull from the Coal Measures of Ohio described by Cope under the name *C. lennicorne* seems, however, to be correctly placed here; but of this animal the trunk still remains unknown.

H. F. O.

* 'Geology and Paleontology of Argentina.' *Geological Magazine*, Vol. IV., No. 391, p. 4, 1897.

† Ceraterpeton Galvani, Huxley. *Geological Magazine*, July, 1897.

‡ Stereosternum from Brazil. *Geological Magazine*, March and April, 1897.

*Ceraterpeton Galvani, Huxley. *Geological Magazine*, July, 1897.

CURRENT NOTES ON ANTHROPOLOGY.

DEFORMED SKULLS FROM GUATEMALA.

AT a recent meeting of the Berlin Anthropological Society Professor Virchow ex-

hibited and described several skulls from ancient graves in the Kekchi district of Guatemala, brought by Mr. Dieseldorf. They were deformed to an unusual degree, to an extent, indeed, not equalled elsewhere in America. The method of deformation was like that of the Natchez Indians, the forehead flattened and pushed back and upward. Just this deformity is seen on many of the Mayan art works, and instead of being caricatures such are regarded by Professor Virchow as actual imitations of this custom of malformation.

They were very fragile, indicating a high antiquity, and the objects associated in the tombs whence they were derived showed them to be pre-Columbian in age. It will be remembered that from these tumuli Mr. Dieseldorf obtained some of the most artistic pottery products known in America.

NATIVE AMERICAN STRINGED INSTRUMENTS.

THIS subject is again discussed in a brief article by Professor Otis T. Mason in the *American Anthropologist* for November last. His conclusion is as follows: "After looking over the musical collection of the United States National Museum and such literature as has been collected by the Bureau of American Ethnology I have come to the conclusion that stringed musical instruments were not known to any of the aborigines of the western hemisphere before Columbus."

While the opinion of one so competent as Professor Mason on this subject demands the utmost respect, some of the examples which I quoted in the *American Antiquarian* (January, 1897) are not considered by him, and seem to present a moderate amount of evidence that the musical string was not wholly unknown to the American race by independent discovery.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

NOTES ON INORGANIC CHEMISTRY.

IN a recent *Comptes Rendus* Moissan calls attention to the fact that calcium carbid is a powerful reducing agent, and hence, when in a fused condition at a high temperature, can furnish, by double decomposition, a number of new compounds. When acting on metallic oxids the metal may be obtained in a free state, or if it is capable of uniting with carbon a carbid is formed. By this reaction Moissan has prepared crystallized carbids of aluminum, manganese, chromium, molybdenum, silicon, etc.

ACCORDING to the *Journal de Pharmacie et de Chimie*, Dutremblay and Lugan expect to make a commercial success of the manufacture of oxygen by the manganate method. The process consists of decomposing manganates of the alkalies by steam at 500°, and then regenerating the manganates by heating in a current of dry air. This process was used by Tessié du Motay some thirty years ago, but afterward abandoned, owing to the caking of the charge and evaporation of the soda, there being great danger of explosions. It is hoped these dangers have been now overcome, and that the process will be a success.

A CAREFUL study of the valence of glucinum by Arthur Rosenheim and Paul Woge appears in the *Zeitschrift für Anorganische Chemie*. A considerable number of double oxalates and tartrates of glucinum and alkalies was prepared, and in all glucinum shows analogy with the bivalent and never with the trivalent metals. The same is true in its molybdate and in the double glucinum alkali sulfites. A more exact proof of its bivalence was shown by the determination of the molecular weight of the chlorid by the boiling-point method, pyridin being used as a solvent. The molecular weight corresponded to the formula $GlCl_2$. The conclusion of the authors is that glucinum is bivalent, and is